

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1430 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,197	11/17/2003	Ji-Young Moon	Q77283	9563
23373 7509 (20)802099 SUGHRUE MION, PLLC 2100 PENNSYL VANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER	
			GERGISO, TECHANE	
			ART UNIT	PAPER NUMBER
	, , , , , , , , , , , , , , , , , , ,			
			MAIL DATE	DELIVERY MODE
			02/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Application No. Applicant(s) 10/713 197 MOON, JI-YOUNG Office Action Summary Examiner Art Unit TECHANE J. GERGISO 2437 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 10/27/2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-7 and 9-11 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) 1-7 and 11 is/are allowed. 6) Claim(s) 9 and 10 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Imformation Disclosure Statement(s) (PTC/G5/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Application/Control Number: 10/713,197 Page 2

Art Unit: 2437

#### DETAILED ACTION

 This is a Final Office Action in response to the applicant's communication filed on October 27, 2008.

### Response to Arguments

Applicant's arguments with respect to claims 9 and 10 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffert et al.
   (hereinafter referred to as Hoffert, US Pat No.: 5, 983, 176) in view of Hannigan et al.
   (hereinafter referred to as Hannigan, US Pat No.: 6, 606, 393).

### As per claim 9:

Hoffert disclosed a method of watermarking a moving picture, the method comprising adjusting contrast of a moving image frame (Figure 9: 216 Image Contrast Adjusting Section; column 19: lines 41-50).

Hoffert does not explicitly extracting edges from the contrast-adjusted frame; and inserting a watermark in portions of the contrast-adjusted frame from which the edges were extracted. Hannigan, in an analogous art however teaches extracting edges from the contrast-adjusted frame; and inserting a watermark in portions of the contrast-adjusted frame from which the edges were extracted (column 11: lines 20-65; column 19: lines 50-63). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Kraft to include the frame is a moving image and a special masking and inserting a watermark in portions of the contrast-adjusted frame from which the edges were extracted frame. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to provide a method of removing fixed pattern noise from a media signal as suggested by Hannigan in (column 1: lines 50-61).

 Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Xie et al. (hereinafter referred to as Xie, US Pat No.: 6, 606, 393) in view of Hannigan et al. (hereinafter referred to as Hannigan, US Pat No.: 6, 606, 393).

### As per claim 10:

Xie discloses a masking method of watermarking a moving picture, the method comprising obtaining a luminance difference between a current frame and a previous frame (Column 7: lines 1-10; column 12: lines 6-25).

Art Unit: 2437

Hoffert does not explicitly extracting edges from the current frame based on the obtained luminance difference; and inserting a watermark in portions of the current frame from which the edges were extracted. Hannigan, in an analogous art however teaches extracting edges from the current frame based on the obtained luminance difference; and inserting a watermark in portions of the current frame from which the edges were extracted (column 11: lines 20-65; column 19: lines 50-63). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Kraft to include the frame is a moving image and a special masking and inserting a watermark in portions of the contrast-adjusted frame from which the edges were extracted frame. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to provide a method of removing fixed pattern noise from a media signal as suggested by Hannigan in (column 1: lines 50-61).

# Allowable Subject Matter

- 6. Claims 1-7 and 11 are allowed.
- 7. The following is an examiner's statement of reasons for allowance:

Claims 1, 6 and 11 include the following features which are not taught or further suggested and would not have been obvious over prior arts of record and these claimed features are:

obtaining a watermark value by exclusive-ORing a random key value and a binary value of a logo image; separately performing a plurality of motion masking operations on

Page 5

identical moving image data; obtaining a global masking value through the separately performed motion masking operations; obtaining a watermarked frame value by adding the watermark value weighted by the global masking value and a control variable to an original frame value; and inserting a watermark into a moving image frame using the watermarked frame.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the notice of reference cited in form PTO-892 for additional prior art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP \$ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/713,197 Page 6

Art Unit: 2437

Contact Information

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Techane J. Gergiso whose telephone number is (571) 272-3784.

The examiner can normally be reached on 9:00am - 6:00pm. If attempts to reach the examiner by

telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)

272-3865. The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Techane J. Gergiso/

Examiner, Art Unit 2437

/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2437